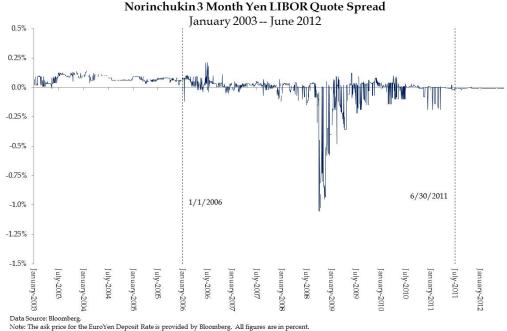


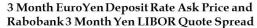
Data Source: Bloomberg.

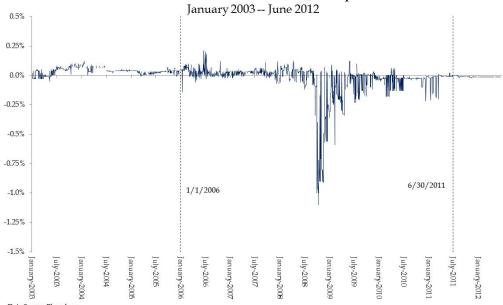
Note: The ask price for the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percent.

#### FIGURE 53

#### 3 Month EuroYen Deposit Rate Ask Price and





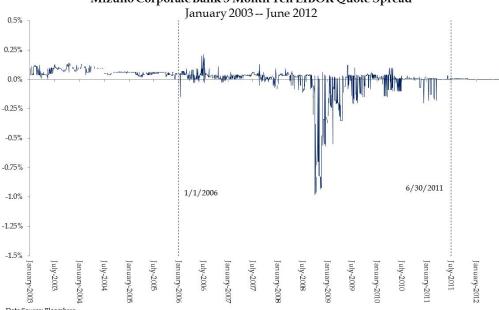


Data Source: Bloomberg.

Note: The ask price for the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percent.

#### FIGURE 55

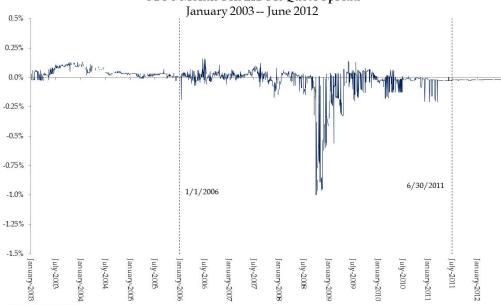
#### 3 Month EuroYen Deposit Rate Ask Price and Mizuho Corporate Bank 3 Month Yen LIBOR Quote Spread



Data Source: Bloomberg.

Note: The ask price for the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percent.

### 3 Month EuroYen Deposit Rate Ask Price and UBS 3 Month Yen LIBOR Quote Spread

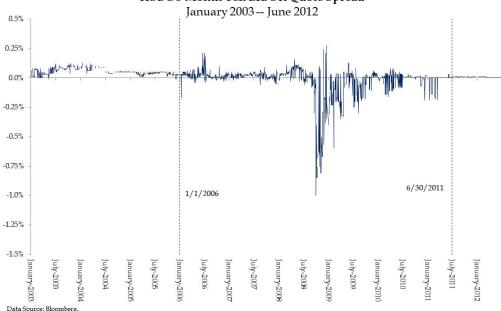


Data Source: Bloomberg.

Note: The ask price for the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percent.

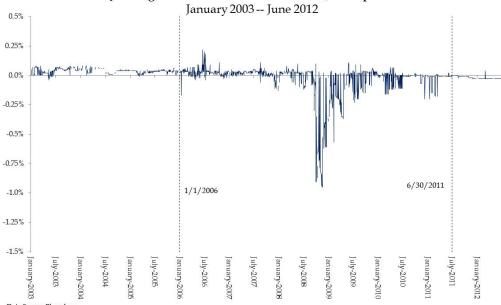
#### FIGURE 57

#### 3 Month EuroYen Deposit Rate Ask Price and HSBC 3 Month Yen LIBOR Quote Spread



Note: The ask price for the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percent.

### 3 Month EuroYen Deposit Rate Ask Price and JP Morgan Chase 3 Month Yen LIBOR Quote Spread

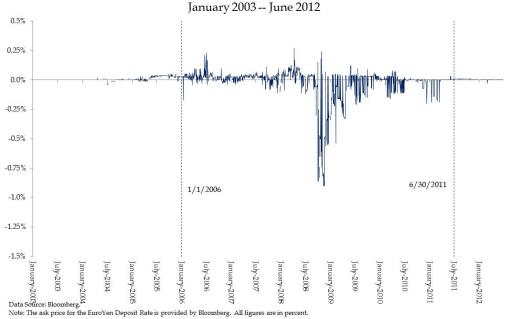


Data Source: Bloomberg.

Note: The ask price for the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percent.

#### FIGURE 59

#### 3 Month EuroYen Deposit Rate Ask Price and Lloyds Banking Group 3 Month Yen LIBOR Quote Spread

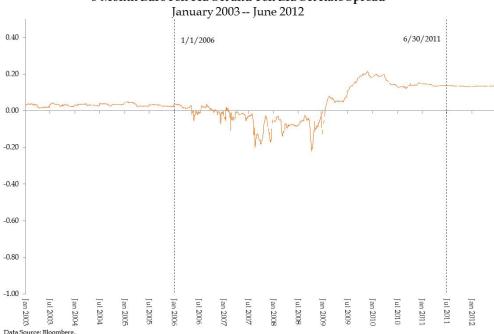


### C. <u>During the Class Period, Euroyen TIBOR and Yen-LIBOR Diverged</u> <u>Dramatically From their Historical Relationship with Each Other</u>

- Yen-LIBOR beginning in January 2003 and ending in June 2012. As demonstrated therein, historically before the start of the Class Period, between January 2003 and December 2005, Euroyen TIBOR and Yen-LIBOR moved closely together with Euroyen TIBOR remaining slightly higher than Yen-LIBOR, causing the Euroyen TIBOR/Yen-LIBOR spread to be slightly positive. In particular, during the 36-month period of January 2003 through December 2005, the average spread of Euroyen TIBOR with respect Yen-LIBOR was a positive 0.024.
- 869. By the start of the Class Period, this historical relationship began to diverge, as Yen-LIBOR increases at a faster rate than Euroyen TIBOR thereby causing a collapse and eventual inversion of the spread between Euroyen TIBOR and Yen-LIBOR (*i.e.*, the spread turns negative as Euroyen TIBOR becomes higher than Yen-LIBOR). During the period of January 1, 2006 through January 15, 2009, the average spread between Euroyen TIBOR and Yen-LIBOR was -0.043. Following January 15, 2009, and continuing through to the end of the Class Period, the relationship between Euroyen TIBOR and Yen-LIBOR remained delinked from its pre-Class Period historical relationship. For example, from January 16, 2009 through the end of the Class Period, the average spread was positive 0.137, far from its historical pre-Class Period average of 0.024 by more than 470%. Further, on November 26, 2009, the Euroyen TIBOR/Yen-LIBOR spread reached as high as 0.216, and on January 27, 2010, it reached as high as 0.200.
- 870. As explained above, important market and financial fundamentals, such as day-to-day changes in monetary policy, market risk and interest rates, as well as risk factors facing the Defendant banks should (absent manipulation) be reflected similarly in Euroyen TIBOR and Yen-LIBOR, and therefore not cause the historical relationship between these rates to diverge.

Significant de-linkages in the historical relationship between Euroyen TIBOR and Yen-LIBOR during the Class Period strongly indicate that Euroyen TIBOR and Yen-LIBOR rates were artificial.

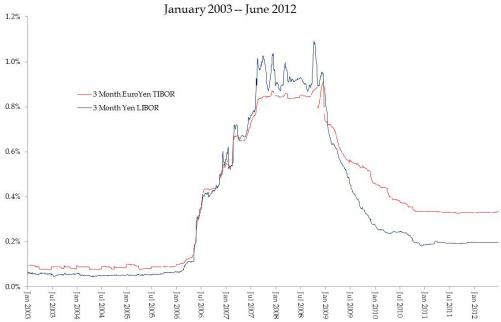
#### 3 Month EuroYen TIBOR and Yen LIBOR Rate Spread



Data Source: Bloomberg. Note: Spread is calculated as 3 Month EuroYen TIBOR minus Yen LIBOR. All figures are in percent.

#### FIGURE 61

#### $3\,Month\,EuroYen\,TIBOR\,and\,3\,Month\,Yen\,LIBOR$



Data Source: Bloomberg.

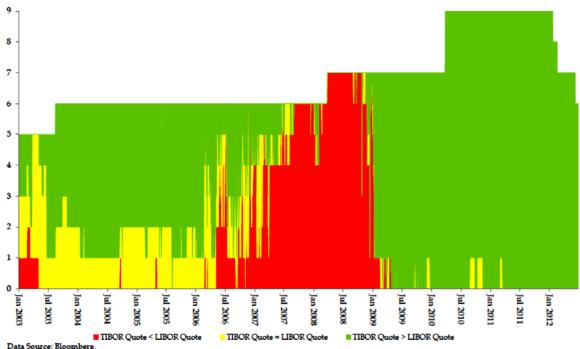
Note: The EuroYen Deposit Rate is provided by Bloomberg and computed as an average of bid and ask prices. All figures are in percent.

### D. The Defendant Banks That Served on Both Panels Submitted Lower Individual Euroyen TIBOR Quotes than Yen-LIBOR

- 871. As explained in ¶¶ 868-70, and Figures 60 and 61 above, the historical pre-Class Period relationship between Euroyen TIBOR and Yen-LIBOR was such that Euroyen TIBOR was slightly higher than Yen-LIBOR.
- 872. As detailed in Figures 62 and 63, the Defendant panel banks that served on both the Euroyen TIBOR and Yen-LIBOR panels repeatedly submitted a <u>lower Euroyen TIBOR</u> quote than Yen-LIBOR quote during the Class Period, which is contrary to the historical pre-Class Period relationship between Euroyen TIBOR and Yen-LIBOR, and the overlapping banks' pre-Class Period conduct. The foregoing further supports that Euroyen TIBOR was artificial during the Class Period.

FIGURE 62

Number of Contributing TIBOR Quotes Greater-Than, Equal-To, and Less-Than Contributing LIBOR Quotes for Overlaping Banks Across Panels



Notes: Only banks that contribute to both the 3 Month Yen LIBOR and the EuroYen TIBOR are represented. The height of each bar displays, on any given day, the number of banks that either submitted (1) TIBOR quotes that were greater than their corresponding LIBOR quotes, (2) TIBOR quotes that were equal to their corresponding LIBOR quotes, or (3) TIBOR quotes that were less than their corresponding LIBOR quotes.

873. As demonstrated in Figure 63 below, Defendants Bank of Tokyo-Mitsubishi, Mitsui Sumitomo Banking Corp., Mizuho Corporate Bank, Norinchukin Bank and JPMorgan Chase, submitted a lower Euroyen TIBOR quote than their Yen-LIBOR quote almost 40% of the time during the Class Period.

#### FIGURE 63

# Comparison of Banks' 3 Month EuroYen TIBOR Quotes against Contributing Banks' 3 Month EuroYen LIBOR Quotes

	1/1/20	003	1/1/2006		
_	12/31/	2005	6/30/2011		
	TIBOR q	uote <	TIBOR q	uote <	
	LIBOR	quote	LIBOR	quote	
Bank of Tokyo-Mitsubishi	0		549	(42%)	
Citibank	0		0	(0%)	
Deutsche Bank	0		156	(20%)	
JP Morgan Chase	99	(14%)	514	(39%)	
Mizuho Corporate Bank	15	(2%)	529	(40%)	
Norinchukin Bank	1	(0%)	532	(41%)	
Royal Bank of Scotland	0		0	(0%)	
Sumitomo Mitsui Banking Corp	1	(0%)	541	(41%)	
UBS AG	2	(0%)	348	(27%)	

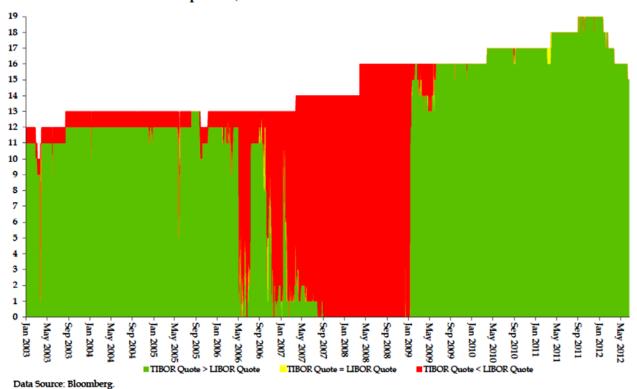
Data Source: Bloomberg.

Notes: Banks overlap across LIBOR & TIBOR panels.

874. Figure 64 below performs a similar analysis, but does not limit its sample to just overlapping Euroyen TIBOR and Yen-LIBOR banks. Instead, Figures 64 and 65 measure all individual Euroyen TIBOR quotes for all reporting Euroyen TIBOR panel banks and compares it to the <u>actual Yen-LIBOR</u> fix.

- 875. In Figure 64, the height of each bar displays, on any given day, the number of banks that either submitted (1) Euroyen TIBOR quotes that were greater than the Yen-LIBOR fix (green); (2) Euroyen TIBOR quotes that were equal to the Yen-LIBOR fix (yellow); or (3) Euroyen TIBOR quotes that were less than the Yen-LIBOR fix (red).
- 876. Figure 64 demonstrates that during the Class Period, from approximately January 2007 through January 2009, on average, 93% of Euroyen TIBOR quotes submitted by Defendant panel banks on the Euroyen TIBOR panel were lower than the actual daily Yen-LIBOR fix. In fact, from September 2007 through January 2009, virtually all of the Euroyen TIBOR Contributor Panel Banks submitted an individual Euroyen TIBOR quote which was lower than the actual Yen-LIBOR fix, day in and day out.

FIGURE 64
Number of Contributing 3 Month EuroYen TIBOR Quotes Greater-Than,
Equal-To, and Less-Than 3 Month Yen LIBOR



Notes: The height of each bar displays, on any given day, the number of banks that either submitted (1) TIBOR quotes that were greater than the LIBOR, (2) TIBOR quotes that were equal to the LIBOR, or (3) TIBOR quotes that were less than the LIBOR.

# Comparison of Banks' 3 Month EuroYen TIBOR quotes against Actual 3 Month Yen LIBOR

	1/1/2003		1/1/20	1/1/2006	
	12/31/	12/31/2005		2011	
	TIBOR < Act	tual LIBOR	TIBOR < Act	ual LIBOR	
Bank of Tokyo-Mitsubishi	0		609	(46%)	
Bank of Yokohama	0		190	(25%)	
Chuo Mitsui Trust	0		418	(58%)	
<u>Citibank</u>	0		0	(0%)	
<u>Deutsche Bank</u>	0		190	(25%)	
JP Morgan Chase	625	(88%)	633	(48%)	
Mitsubishi UFJ Trust	0		540	(41%)	
Mizuho Bank	0		593	(45%)	
<u>Mizuho Corporate Bank</u>	0		543	(41%)	
Mizuho Trust & Banking	0		578	(44%)	
<u>Norinchukin Bank</u>	0		580	(44%)	
Resona Bank	0		545	(42%)	
Royal Bank of Scotland	0		0	(0%)	
Shinkin Central Bank	0		523	(40%)	
Shoko Chukin Bank	0		546	(42%)	
Sumitomo Mitsui Banking Corp	1	(0%)	544	(41%)	
Sumitomo Trust & Banking	0		543	(41%)	
UBS AG	66	(12%)	496	(38%)	

Data Source: Bloomberg; CMA

Notes: Underlined banks overlap across LIBOR & TIBOR panels. The 3 Month EuroYen Deposit Rate is provided by Bloomberg.

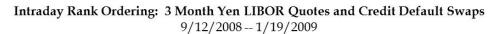
Percentages are computed with respect to each respective bank's total number of TIBOR quotes in each given period.

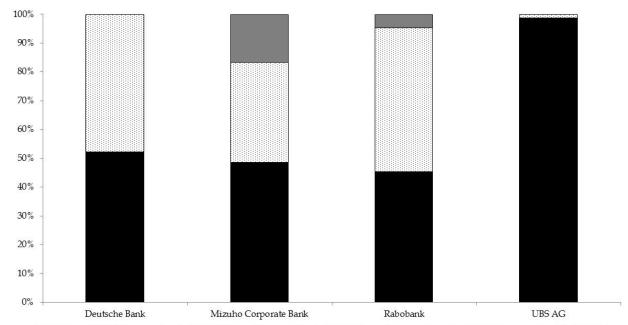
### E. The Difference Between Defendants' Reported Yen-LIBOR Quotes and their CDS Spreads Strongly Supports Yen-LIBOR Artificiality

- 877. Another economic indicator that Yen-LIBOR was artificial during the Class Period is the difference between the Yen-LIBOR Defendant panel banks' reported daily Yen-LIBOR quotes and the contemporaneous cost of buying default insurance, known as the "spread," on credit-default swaps ("CDS") that Yen-LIBOR Defendant panel banks issued during the Class Period.
- 878. A CDS is a contract which transfers credit risk from a credit protection buyer to a credit protection seller. This agreement occurs when one party, the protection buyer, seeks financial protection in event of a default on an underlying credit instrument, such as a bond or a loan. Generally, a CDS buyer makes a series of payments (known as the CDS "fee" or "spread") to the CDS seller in exchange for a payment if the underlying credit instrument experiences an adverse credit event.
- 879. The spread serves as a measure of the perceived risk of default by the entity issuing the underlying bond or receiving the loan. Typically, the greater the risk of default the underlying bond or loan bears, the higher the CDS spread. In the case of a CDS for which the underlying instrument consists of an interbank loan where a Yen-LIBOR panel bank is the borrower, the greater the perceived risk the panel bank will default on the loan, the higher the applicable CDS spread, as this higher spread represents the cost of insuring against the increased risk of a default on the underlying loan.
- 880. It is expected that an individual Yen-LIBOR bank's daily quote and its CDS spreads should move in relative lockstep, meaning that when an individual bank has a CDS spread that is one of the lowest when compared to all other banks in the group, it should also have one of the lowest LIBOR quotes in the group. Plaintiff's economic analyses indicate that

this was not the case during the Class Period, and in particular from September 12, 2008 through January 19, 2009, when banks with the highest CDS spreads in the Yen-LIBOR panel very often (nearly 100% of the time) submitted the lowest Yen-LIBOR quotes.

- 881. Plaintiff analyzed available CDS spread data for select Yen-LIBOR panel banks.
- whereby on each given day, Yen-LIBOR quotes submitted by Yen-LIBOR panel bank
  Defendants were ranked (ordered) from highest to lowest. The quotes were then classified into
  two groups: above or equal, and below the median Yen-LIBOR quote for that day, among the
  same group of banks. Similar rank ordering was performed for CDS spreads for the same group
  of banks, and the CDS spreads were classified into two groups:, above or equal, and below the
  median CDS spread on that day, within the same group of banks. For each bank, results were
  organized into the three following groups: (i) Yen-LIBOR Quote Below Median & CDS Above
  or Equal Median (Black); (ii) Yen-LIBOR Quote Below Median & CDS Above or
  Equal Median together with Yen-LIBOR Quote Below Median & CDS Below Median (Dotted);
  and (iii) Yen-LIBOR Quote Above or Equal Median & CDS Below Median (Gray).
- 883. Among other findings, Figure 66 shows that from September 12, 2008 through January 19, 2009, Defendant UBS' Yen-LIBOR quotes were below its CDS spread almost 100% of the time, and that the Yen-LIBOR quotes submitted by Defendants Deutsche Bank, Mizuho Corporate Bank, and Rabobank were below their respective CDS spreads 50% (or nearly 50%) of the time.





■ LIBOR Below & CDS Above or Equal □ LIBOR Below (Above or Equal) & CDS Below (Above or Equal) ■ LIBOR Above or Equal & CDS Below Data Source: LIBOR data from Bloomberg; Credit Default Swap (CDS) data from CMA, starting on 9/12/2008.

Notes: Intraday ordering of 3 Month Yen LIBOR quotes and respective CDS Spreads. On each given day, banks LIBOR quotes are orderedfrom highest to lowest, and classified into two groups: above or equal, and below the median LIBOR quote for that day, among the same group of banks. Similar ordering is performed for the available CDS spreads for the same group of banks conditional on data availability, classifying them into above or equal and below the median CDS spread on that day, within the same group. For each bank, results are organized in three groups: LIBOR Quote Below Median & CDS Above or Equal Median (black), LIBOR Quote Aboveor Equal Median & CDS Below Median (active). The CDS data used are for the banks' one year senior debt CDS contracts in USD.

884. Figure 67 below illustrates additional examples of when Yen-LIBOR Defendant banks submitted Yen-LIBOR quotes well below their then-prevailing CDS spreads. For example, on October 15, 2008, Deutsche Bank submitted the lowest Yen-LIBOR quote, yet its CDS spread was the 9th lowest amongst 12 CDS spreads for that day. This means that Deutsche Bank had one of the highest CDS spreads among the Yen-LIBOR panel banks on that day, while having the lowest Yen-LIBOR quote. UBS is one of the banks with the largest difference between its CDS spreads and Yen-LIBOR quotes. For example, on September 16, 25, 26 and 29 of 2008, UBS submitted the lowest Yen-LIBOR quote yet it had the highest CDS spread among 12 CDS spreads for that day.

FIGURE 67

#### Intraday Rank Ordering of LIBOR Quotes and Credit Default Swaps

	10/15/2008		10/22	2/2008	10/23/2008 10/24		/2008	
	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank
Deutsche Bank	1	9	2	11	2	11	2	11
	10/8/2	2008	10/15	10/15/2008 10/28/200		3/2008	11/4/2008	
	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank
Mizuho Corporate Bank	3	10	5	11	1	8	4	10
								_
	10/10/	2008	10/13	3/2008	10/14	/2008	12/16	5/2008
	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank
Rabobank	1	8	1	9	1	9	2	10
•								
	9/16/2	2008	9/25	/2008	9/26	/2008	9/29	/2008
	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank	LIBOR Ran	k CDS Rank
UBS AG	1	12	1	12	1	12	1	12

Data Source Bloomberg; CDS data from CMA

Note The rank is from lowest to highest, i.e., a rank of 1 for LIBOR means that the bank had the lowest quote submitted that day Similarly, a rank of 9 for CDS means that the bank had the ninth lowest CDS subnitted that day On each given day there were an average of 12 to 13 banks contributing to the LIBOR panel for which CDS data were available

### IX. Three-Month Yen-LIBOR and Euroyen TIBOR Directly Impact the Price of Euroyen Tibor Futures Contracts

885. To further demonstrate that both Yen-LIBOR and Euroyen TIBOR directly impact the price of Euroyen TIBOR futures contracts, Plaintiff conducted additional statistical analyses comparing the price of the nearby most active <sup>347</sup> TFX, SGX, and CME three-month Euroyen TIBOR futures contracts to Yen-LIBOR and Euroyen TIBOR during the Class Period.

886. Plaintiff tested whether the prices of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts exhibited a "linear relationship," and correlated along a straight line, with Yen-LIBOR and/or Euroyen TIBOR during the Class Period.

<sup>&</sup>lt;sup>347</sup> Euroyen TIBOR futures contracts trade in three-month quarterly cycles expiring every March, June, September and December. The nearby most active contract refers to the contract expiring during the current three-month cycle, for example the nearby most active contract in the month of February would be the contract expiring in March.

887. Plaintiff calculated the Pearson Product-Moment Correlation Coefficient ("PPMCC") for the relationship between three-month Yen-LIBOR, three-month Euroyen TIBOR, and the prices of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts between January 1, 2006 and December 31, 2010. The PPMCC quantifies the linear nature of the relationship between two variables on a scale of +1 to -1. A positive PPMCC demonstrates a "positive linear relationship," which indicates that the values being compared tend to increase and decrease together. A negative PPMCC represents an "inverse linear relationship," indicating that the two variables tend to move opposite each other, with one increasing as the other is decreasing. The larger the PPMCC is in absolute terms, *i.e.*, the closer it is to either +1 or -1, the stronger the relationship between those two variables and the more they tend to follow a straight line.

#### FIGURE 68

PPMCC For Three-Month Euroyen TIBOR Futures Contract Prices and Three-Month Yen-LIBOR/Euroyen TIBOR						
	3M Euroyen TIBOR 3M Yen-LIBOR					
TFX Futures	-0.95811	-0.95806				
SGX Futures	-0.95717	-0.95751				
CME Futures	-0.95666	-0.95663				

888. Figure 68 contains the PPMCC for the relationship between the daily closing price of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts, three-month Yen-LIBOR and three-month Euroyen TIBOR. Figure 68 demonstrates that the relationship between three-month Yen-LIBOR and the price of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts is characterized by a PPMCC of smaller than -0.95. The negative PPMCC

<sup>&</sup>lt;sup>348</sup> For more on correlation coefficients, *see* David H. Kaye & David A. Freedman, FEDERAL JUDICIAL CENTER, *Reference Guide on Statistics*, *in* REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 261-263 (3d ed. 2011).

indicates an inverse relationship whereby the price of each Euroyen TIBOR futures contract decreases as Yen-LIBOR increases and vice versa. The large negative value of greater than 0.95 indicates that a strong linear relationship exists between Yen-LIBOR and the prices of TFX, SGX and CME Euroyen TIBOR futures contracts.

889. The same relationship also exists between three-month Euroyen TIBOR and the price of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts. Figure 68 shows that the relationship between three-month Euroyen TIBOR and the price of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts is also characterized by a PPMCC of smaller than -0.95. The large negative value of greater than -0.95 indicates a strong relationship exists between Euroyen TIBOR and the prices of TFX, SGX and CME Euroyen TIBOR futures contracts.

TIBOR futures contract prices and (1) three-month Yen-LIBOR; (2) three-month Euroyen
TIBOR; (3) three-month Yen-LIBOR and three-month Euroyen TIBOR. A regression analysis
is a statistical tool used to understand the relationship between or among two or more
variables.<sup>349</sup> In every regression, there is at least one variable called the "dependent variable,"
whose value is determined by the model, and one or more "explanatory variables" that produce
changes in the dependent variable. The goal of a regression analysis is to take a set of observed
values, for example the price of CME Euroyen TIBOR futures contracts and the three-month
Yen-LIBOR on a series of days, and to generate a mathematical formula that can "model," or
describe the relationship between those variables.

<sup>&</sup>lt;sup>349</sup> See Kaye & Freedman, supra note 348 at 264; see also Alan O. Sykes, An Introduction to Regression Analysis, UNIVERSITY OF CHICAGO LAW SCHOOL, http://www.law.uchicago.edu/files/files/20.Sykes\_.Regression\_0.pdf.

891. One type of regression model, known as a "linear regression model," uses a linear equation to describe the relationship between the dependent and explanatory variables. The goal of a linear regression model is to calculate the formula for a straight line that best represents the relationship between the observed dependent and explanatory variables. That line is represented by the following equation:

$$y = \alpha + \beta x + \varepsilon$$

where y is the dependent variable and x is the explanatory variable.<sup>351</sup>  $\alpha$ ,  $\beta$ , and  $\varepsilon$  help to explain the change in y that results from a change in x.  $\alpha$  and  $\beta$  are both constant terms that do not change with the values of x and y.  $\alpha$  represents the "y intercept" of the line, or the value of dependent variable y when explanatory variable x equals zero.  $\beta$  represents the "slope" of the line, or how much the value of dependent variable y changes with each unit of explanatory variable y. y is not exactly equal to y is not exactly equal to y is not exactly equal to y.

892. The strength of a regression model, that is how well it describes the relationship between the dependent and explanatory variables, is measured by a combination of several other statistical coefficients. One statistic to consider in evaluating the strength of a regression model is the "p value," which measures the probability that the relationship between an explanatory variable and the dependent variable is the result of random chance. The smaller the p value, the less likely the relationship between the dependent and explanatory variable is attributable to

<sup>&</sup>lt;sup>350</sup> There are two kinds of linear regression models. A "simple" linear regression model has only one explanatory variable; a "multiple" linear regression model has several explanatory variables.

<sup>&</sup>lt;sup>351</sup> In a multiple linear regression, additional βx terms would be added for each additional explanatory variable. For example, a model with two explanatory variables would be represented by  $y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \varepsilon$ 

<sup>&</sup>lt;sup>352</sup> See Kaye & Freedman, supra note 348 at 249 – 251.

chance, the more statistically significant their relationship. Statisticians use the p value to determine whether it is appropriate to reject the "null hypothesis," *i.e.*, the default assumption that the dependent variable and explanatory variable are not related. Generally a p value of less than 0.05 indicates that the relationship between the dependent and explanatory variables is statistically significant while a p value of less than 0.01 indicates the relationship highly significant. In both cases, where p is less than 0.05 or 0.01, it is appropriate to reject the null hypothesis and accept that the dependent and explanatory variables are related.

893. Another statistic to consider in evaluating a regression analysis, " $R^2$ ," is a value between 0 and 1 that represents the amount of variability in the dependent variable that is explained by the regression model.  $R^2$ , which is called the "coefficient of determination" addresses how well the data fits with the regression line. The closer the points are to the line, the more the variation in the dependent variable is explained by the regression model, the larger the value of  $R^2$ .

FIGURE 69

Euroyen TIBOR Futures Prices vs. Yen-LIBOR and/or Euroyen TIBOR							
	3M Yen-LIBOR		3M Euroy	en TIBOR	3M Yen-l 3M Euroye		
	β	$\mathbb{R}^2$	β	$\mathbb{R}^2$	β	$\mathbb{R}^2$	
TFX	-689	0.9187	-913	0.9186	-346 -473	0.9372	
SGX	-687	0.9165	-909	0.9157	-348 -467	0.9348	
CME	-0.68	0.9161	-0.90	0.9168	-0.34 -0.46	0.9346	

894. Using a linear regression model to analyze the price of Euroyen TIBOR futures contracts relative to Yen-LIBOR and Euroyen TIBOR is appropriate for two reasons. First, the PPMCC analysis, Figure 68, demonstrates that the TFX, SGX, and CME three-month Euroyen

TIBOR futures contracts all exhibit a linear relationship when compared to three-month Yen-LIBOR and three-month Euroyen TIBOR. Second, the formula used to price Euroyen TIBOR futures contracts is a linear equation.<sup>353</sup> As a result, a linear regression model can accurately describe the relationship between the price of TFX, SGX, and CME three-month Euroyen TIBOR futures contacts and both Euroyen interest rates.

895. Figure 69 contains the slope  $\beta$  and  $R^2$  value<sup>354</sup> of linear regression analyses comparing the closing prices for TFX, SGX and CME Euroyen TIBOR futures contracts to (1) three-month Yen-LIBOR; (2) three-month Euroyen TIBOR; (3) both three-month Yen-LIBOR and three-month Euroyen TIBOR, between January 1, 2006, and December 31, 2010.<sup>355</sup>

896. The results displayed in Figure 69 demonstrate that three-month Yen-LIBOR and three-month Euroyen TIBOR directly impact the price of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts. Three-month Yen-LIBOR and three-month Euroyen TIBOR each produced statistically significant price changes in TFX, SGX, and CME three-month Euroyen TIBOR futures contracts. The change in price produced by a change in the interest rate is represented by  $\beta$ , the slope of the equation generated by the regression model. A negative slope value is consistent with the PPMCC analysis in Figure 68, which indicated that Euroyen TIBOR futures contract prices exhibit an inverse linear relationship to three-month Yen-LIBOR and three-month Euroyen TIBOR. That inverse linear relationship is reflected in the negative  $\beta$ ,

<sup>&</sup>lt;sup>353</sup> Euroyen TIBOR futures contract prices are quoted as 100 minus the interest rate paid on a three-month 100,000,000 Japanese yen time deposit. Comparing this price calculation, price = 100 + (-1 \* interest rate), to the linear function  $y = \alpha + \beta x$  indicates that they are in the same format.

 $<sup>^{354}</sup>$  For the last model, 3M Yen-LIBOR + 3M Euroyen TIBOR, the  $\beta$  column contains both slope values. The slope produced 3M Yen-LIBOR is on top and the slope for Euroyen TIBOR is on the bottom.

<sup>&</sup>lt;sup>355</sup> For more on how a multiple linear regression works, *see* Daniel L. Rubenfeld, FEDERAL JUDICIAL CENTER, *Reference Guide on Multiple Regression, in* REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 303-357 (3<sup>rd</sup> ed. 2011).

which indicates that an increase in three-month Yen-LIBOR and/or three-month Euroyen TIBOR produces a decrease in Euroyen TIBOR futures contract prices.

- 898. The significance of the relationship between the price of Euroyen TIBOR futures contracts and Yen-LIBOR and Euroyen TIBOR is further demonstrated by the high R² values produced by each of the regression models presented in Figure 69. The regression models using either Yen-LIBOR or Euroyen TIBOR as explanatory variables produced R² values of at least 0.915, indicating that Yen-LIBOR and Euroyen TIBOR independently explained more than 91.5% of changes in the price of Euroyen TIBOR futures contracts. When both three-month Yen-LIBOR and three-month Euroyen TIBOR were used together as explanatory variables in a multiple regression analysis, the relationship was even stronger. Using both Yen-LIBOR and Euroyen TIBOR together produced R² values of at least 0.934, indicating that more than 93.4% of price changes in Euroyen TIBOR futures contracts is explained by three-month Yen-LIBOR and three-month Euroyen TIBOR futures contracts is explained by three-month Yen-LIBOR
- 899. Plaintiff expanded his analysis to examine the relationship between Euroyen TIBOR futures contract prices and multiple "tenors" or interest rate maturities or Yen-LIBOR

and Euroyen TIBOR. Because multiple tenors of both Yen-LIBOR and Euroyen TIBOR are published at the same time each day, Plaintiff conducted a multiple regression analysis comparing the six-month, three-month, one-month, and one-week maturity of Yen-LIBOR and Euroyen TIBOR to the price of Euroyen TIBOR futures contracts from January 1, 2006, through December 31, 2010.

FIGURE 70

<b>Euroyen TIBOR Futures Contract Prices vs. Yen-LIBOR and Euroyen TIBOR Tenors</b>							
	CN	<b>IE</b>	TI	TFX		GX	
	β	p	β	p	β	p	
6M LIBOR	0.790	2x10 <sup>-16</sup>	776.5	$2x10^{-16}$	771.4	2x10 <sup>-16</sup>	
3M LIBOR	-1.181	2x10 <sup>-16</sup>	-1152	2x10 <sup>-16</sup>	-1155	2x10 <sup>-16</sup>	
1M LIBOR	0.199	$2x10^{-6}$	175.1	3.x10 <sup>-5</sup>	175.0	$5x10^{-5}$	
1W LIBOR	0.128	0.0017	92.98	0.0237	115.9	0.005	
6M TIBOR	-1.599	2x10 <sup>-16</sup>	-1572	2x10 <sup>-16</sup>	-1576	2x10 <sup>-16</sup>	
3M TIBOR	1.225	2x10 <sup>-16</sup>	1165	$2x10^{-16}$	1187	2x10 <sup>-16</sup>	
1M TIBOR	-0.215	$4x10^{-5}$	-189.1	0.0002	-187.2	0.0004	
1W TIBOR	-0.228	$1x10^{-5}$	-180.6	0.0004	-213.2	4x10 <sup>-5</sup>	
	$\mathbb{R}^2$ (	).955	$\mathbb{R}^2$	0.955	$\mathbb{R}^2$	0.954	

900. Figure 70 demonstrates that the price of three-month Euroyen TIBOR futures contracts is impacted by six-month, three-month, one-month and one-week tenors of Yen-LIBOR and Euroyen TIBOR. All four tenors included in Figure 70 provided statistically significant contributions to the model of Euroyen TIBOR futures prices with p values less than 0.05. Furthermore, the resulting  $R^2$  values of 0.955, 0.955, and 0.954 demonstrate that more than

95.4% of changes in the price of TFX, SGX, and CME Euroyen TIBOR futures contracts are explained by the four tenors included in each model.

901. The statistical relationship demonstrated in Figure 70 is supported by and consistent with the way Defendants viewed the relationship between the various Yen-LIBOR and Euroyen TIBOR tenors. Communications between Defendants, taken from settlements with various government agencies, demonstrate that Defendants understood that a range of Yen-LIBOR and Euroyen TIBOR tenors impacted the price of Euroyen-based derivatives. For example, on October 25, 2006, "Rabobank Yen Desk Manager 1" emailed "Yen Trader-Submitter 1" asking for low Yen-LIBOR submissions in the "1m-6m" and "7 mth outward" tenors to benefit his position of "a few chunky rolls in 3 mnth yen libors":

#### Yen Desk Manager 1 email to Yen Trader-Submitter 1:

Subject: libors

Hi mate

I have a few chunky rolls in the 3 mth yen libors in the next few days. I don't want to compromise your integrity.. but if you've got ntg in it maybe a smidge lower today (actually shud be anyway as futures are abt 1 higher anyway) and then high for Thurs and Fri would be great then I will back in my box for another 2 weeks

Cheers

#### Yen Trader-Submitter 1 reply to Yen Desk Manager 1:

Subject: RE: libors

sure no problem mate if you have a sec can i have the lvls plse

regards

#### Yen Desk Manager 1 reply to Yen Trader-Submitter 1:

Subject: RE: libors

Hi mate

Think you would get away with what you put in yesterday, except from 1m-6m maybe 1 bp lower as dec future has had a little rally today. And the other futures are pretty much unchanged, maybe even 0.5 lower.

From 7 mth outwards you would be fine leaving same as yesterday as the futures from March outwards are pretty much unchanged, maybe even 0.5 lower. I have your libors from yesterday if you don't have a record – just let me know and I will bosh them over

Cheers

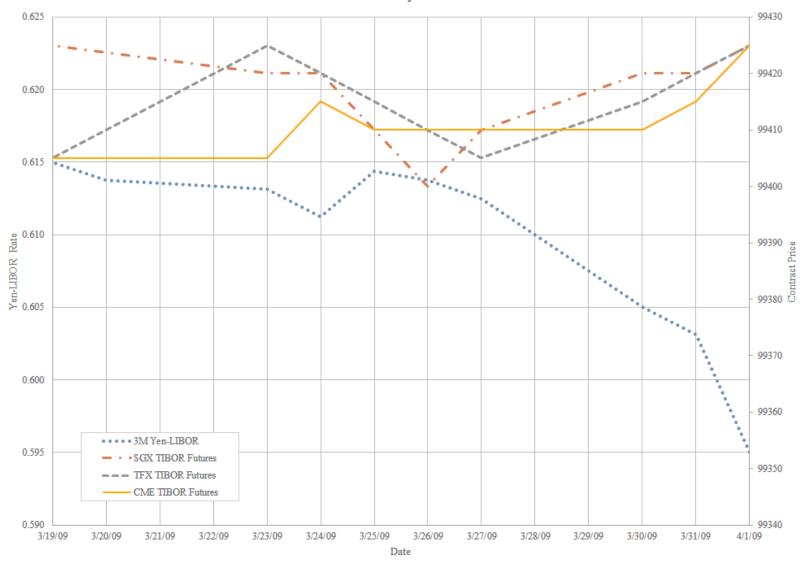
902. Defendants also recognized the interchangeable nature of Yen-LIBOR and Euroyen TIBOR, *i.e.*, changes in one impact positions priced off the other. In the communication below, UBS Trader-1, is complaining to his manager that UBS's Yen-LIBOR submissions are submissions negatively impacting his "tibor/libor" derivatives positions:

"We have a large tibor/libor position which loses if libors move higher. 4[million dollars per basis point]. . . . Group treasury has informed [LIBOR submitters] to put all fixings in the middle of the pack. This has resulted in UBS personally contributing to a ½ bp higher fixing today."

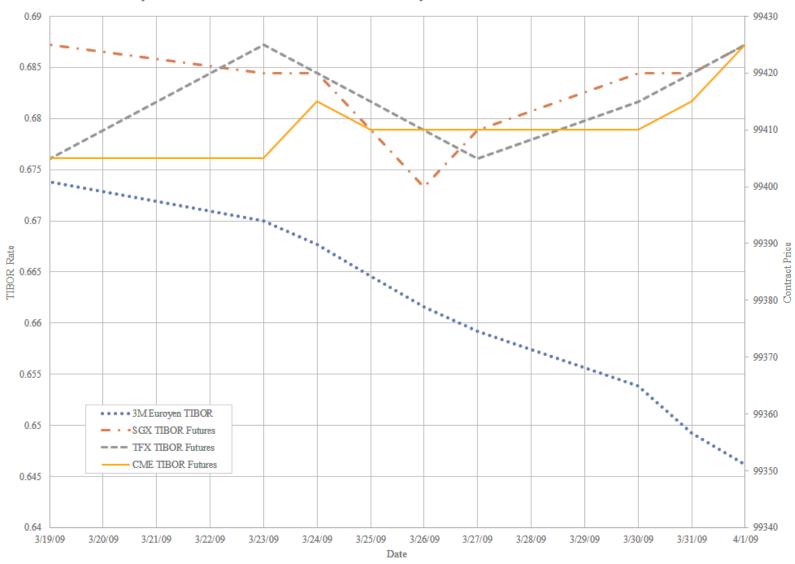
903. Although only a small fraction of Defendants' communications regarding Yen-LIBOR and Euroyen TIBOR manipulation have been released as a result of government settlements, to provide empirical evidence that Defendants' manipulation of Yen-LIBOR and Euroyen TIBOR impacted the price of Euroyen TIBOR futures contracts, Plaintiff compared the price of Euroyen TIBOR futures contracts to Yen-LIBOR and Euroyen TIBOR on days when communications between Defendants show manipulative conduct.

FIGURE 71

Yen-LIBOR Rate vs. TFX - SGX - CME Euroyen TIBOR Futures Prices - 3/19/09 - 4/1/09



Euroyen TIBOR Rate vs. TFX - SGX - CME Euroyen TIBOR Futures Prices - 3/19/09 - 4/1/09



904. Figures 71 and 72 display the price of TFX, SGX and CME three-month Euroyen TIBOR futures contracts compared to three-month Yen-LIBOR and three-month Euroyen TIBOR from March 19, 2009 through April 1, 2009. During that time period, communications released as part of UBS and R.P. Martin's settlements with the CFTC, in addition to UBS' settlement with the DOJ, indicate a persistent manipulative effort by Defendants to artificially lower Yen-LIBOR.

905. Beginning on March 19, 2009, UBS Senior Yen Trader Hayes initiated contact with Derivatives Broker B1 [later identified as R.P. Martin] to solicit help pushing Yen-LIBOR artificially lower:

Senior Yen Trader [Tom Hayes]: "need low everything pls try really hard to get [Yen Bank J] down"

Derivatives Broker B1: "ok did he put them down yesterday?"

Senior Yen Trader [Tom Hayes]: "nah same"

Derivatives Broker B1: "ok"

Senior Yen Trader [Tom Hayes]: "[Yen Bank I] too for 3m the people are [Yen Bank I] at 63 [Yen Bank J] 62 [Yen Bank H] 62 [Yen Bank B] 62 [Yen Bank K] 63 he def should be lower [Yen Bank A] 62 [Yen Bank G] 63 all those we can get down to 60 or 61..."

Senior Yen Trader [Tom Hayes]: "ok try for [Yen Panel Bank J] and the Japanese

[panel banks] and [Yen Bank I] as priority pls"

Derivatives Broker B1: "kkk"

Senior Yen Trader [Tom Hayes]: "thx ... pls push really hard."

<u>Derivatives Broker B1</u>: "yes already had a word with a couple of them [Yen Bank J] n [Yen Bank B] said they should be lower workin on [Yen Bank A] n [Yen Bank K]"

Senior Yen Trader [Tom Hayes]: "ta."

906. Defendants' efforts to lower Yen-LIBOR continued on March 23, 2009, when again UBS Senior Yen Trader Hayes approached R.P. Martin, in addition to unidentified Derivatives Brokers C1 and D1, for assistance in manipulating Yen-LIBOR. This time UBS Senior Yen Trader Hayes specifically requested lower three-month Yen-LIBOR but higher one-month and three-month submissions:

<u>Senior Yen Trader [Tom Hayes]</u>: "Hi need LOW 3m and 1m HIGH 6M, 3m is most important [Yen Bank A] and [Yen Bank K] both setting 62 they should be lower [Yen Bank A] is setting lower in 3m tibor [Yen Banks I, H and G] both at 62, they can go to 61? For 6m push for higher thanks"

907. Communications evidence that Defendants' efforts to lower three-month Yen-LIBOR increased over the next few days in late March 2009. By March 30, 2009, UBS Senior Yen Trader Tom Hayes begged R.P. Martin [Derivatives Broker B1 below] for help to move three-month Yen-LIBOR and Euroyen TIBOR down by at least 2 basis points. Derivatives Broker B1 responded to the request by offering to send "spoof offers", or false interbank rates, into the market to help move Yen-LIBOR rates lower and financially benefit Defendants Euroyen-based derivatives positions.

Senior Yen Trader [Tom Hayes]: "i REALLY REALLY need Im down to 35 and 3m down to 59 6m i'd prefer unchanged ... use the turn to push Im and 3m down as much as you can ... but need 3m lower pls by 2bp or so"

<u>Derivatives Broker B1</u>: "ok mate ustd ill get on the case ... ok **im gonna get some spoof offers on the baord** [sic] 1 3s"

908. Defendants' effort to lower Yen-LIBOR and Euroyen TIBOR continued on March 31, 2009, when UBS Senior Yen Trader Tom Hayes approached unidentified Broker-C to influence 9 of the 16 banks on the Yen-LIBOR Panel to lower their Yen-LIBOR submissions relative to those from the previous day, successfully resulting in lower one-month and three-month Yen-LIBOR.

- 909. Figures 71 and 72 demonstrate that following March 19, 2009, consistent with UBS Senior Yen Trader Tom Hayes' efforts, and those of at least three other Derivatives Brokers B1, C1, and D1, Yen-LIBOR fell two basis points and Euroyen TIBOR fell three basis points.
- 910. Following March 30, 2009, when Senior Yen Trader Tom Hayes enlisted Broker-C to influence 9 of the 16 Yen-LIBOR Panel banks to submit lower Yen-LIBOR quotes than the previous day, three-month Yen-LIBOR continued to move downward and the price of TFX, SGX, and CME three-month Euroyen TIBOR futures contracts all moved higher, as expected and caused by Defendants, and consistent with Plaintiff's statistical model.

## X. <u>During the Class Period, Plaintiff Transacted in Euroyen-Based Derivatives at Artificial Prices Proximately Resulting From Defendants' Manipulation and False Reporting of Euroyen TIBOR and Yen-LIBOR</u>

#### A. Plaintiff Laydon

- 911. Plaintiff Laydon engaged in U.S. based-transactions of Euroyen-based derivatives during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade as alleged herein, and as of consequence thereof was damaged and suffered legal injury. In particular, Laydon initiated a short position by selling five December 2006 CME Euroyen TIBOR futures contracts on July 13, 2006 at a price of \$99.315 per contract. Plaintiff Laydon subsequently liquidated that position by purchasing five long CME Euroyen TIBOR futures contracts on August 30, 2006 at a price of \$99.490 per contract for loss of \$2,150.35.
- 912. The profit or loss realized on a short futures position is equal to the difference between the price at which the short position was initiated ("initiation price") and the price at which it was subsequently liquidated ("liquidation price"). Unlike a long position, which increases in value with the price of the futures contract, a short position increases in value if the price of the contract sold short decreases below the initiation price (*i.e.*, initiation price smaller

liquidation price = profit). If the price of the contract sold short increases above the initiation price the investor loses money (i.e., initiation price – larger liquidation price = loss).

913. Plaintiff Laydon was injured as a result of Defendants' manipulative conduct because he initiated his short position in CME Euroyen TIBOR futures contracts at an artificially lower price and purchased offsetting CME Euroyen TIBOR futures contracts at an artificially higher price. Communications between Defendants, released as part of Rabobank's settlements with both the DOJ and CFTC, show that Defendants were engaged in manipulating Yen-LIBOR higher at the time Plaintiff Laydon initiated his short CME Euroyen TIBOR futures position, driving the price of CME Euroyen TIBOR futures contracts artificially lower on July 13, 2006:

#### July 6, 2006:

Senior Yen TraderSubmitter [Paul Robson]: for info i need a high 1mth set today - i
will be setting something ridiclous

like 28 or 29 for info

Panel Bank C Yen

Submitter:

cool suits me too to be honest...

#### July 27, 2006:

Senior Yen Trader: ...today if possible,,,, i wud like

higher 1m libor.

<u>Senior Yen Trader-</u> ok mate – what lvl u want set?...i

Submitter [Paul Robson]: actually meant what lvl do u want

me to set for the 1m libor fix...i

will set anything you need

Senior Yen Trader: if u can be the same at yday or a

bit higher than yesterday, im

fine mate

Senior Yen Trader- i'll set 37;)

Submitter [Paul Robson]:

Senior Yen Trader: ok mate cheers

- 914. As a result of Defendants' manipulative conduct, Plaintiff Laydon initiated his short position of five CME Euroyen TIBOR futures contracts on July 13, 2006, at an artificially lower price and was thereby injured by Defendants' manipulative conduct.
- 915. Communications between RBS Japanese yen traders, released as part of RBS's settlement with the CFTC, show that Defendants were also engaged in manipulating six-month Yen-LIBOR "as low as possible" on August 29, 2006, the day before Plaintiff Laydon liquidated his short position by purchasing CME Euroyen TIBOR futures contracts, thereby driving the price of CME Euroyen TIBOR futures contracts higher:

**Yen Trader 3**: big 6m fix today

Yen Trader 4: we got loads yea [...] need it kept low but I think we're on the low

side of the fix anyway

**Yen Trader 3**: will try to get it as low as possible.

916. As a direct and proximate result of Defendants' manipulative conduct, Plaintiff
Laydon purchased the five offsetting long CME Euroyen TIBOR futures contracts on August 30,
2006, at artificially inflated prices and was thereby injured by Defendants' manipulative conduct.

### XI. <u>Defendants Aided and Abetted the Manipulation in Restraint of Trade by Collusively</u> Fixing the Price of Euroyen-Based Derivatives.

- A. <u>Direct Evidence Reveals and Factual Admissions Confirm That Defendants, Including UBS, RBS, Rabobank, Deutsche, JPMorgan, Lloyds, Citigroup, ICAP and R.P. Martin Conspired To Fix the Price of Euroyen-Based Derivatives.</u>
- 917. The instant messages and other communications collected by the DOJ Antitrust Division, the CFTC, and the FSA, and set forth in the Appendix to this Complaint vividly reveal pervasive collusion by UBS, RBS, Rabobank, Lloyds, Deutsche Bank and other Contributor Bank Defendants. Notwithstanding the fact that hundreds of instant messages have been made publicly available, these messages represent but a very small sampling of the total record of all collusive messages.

- 918. On December 4, 2013, the EC issued a press release announcing a €670 million (\$870 million) fine against Defendants UBS, RBS, Deutsche, JPMorgan, Citigroup and R.P. Martin all in connection with each Defendants involvement in one or more "cartels in Yen Interest Rate Derivatives."
- 919. The EC uncovered seven (7) distinct bilateral infringements lasting between 1 and 10 months in the period from 2007 to 2010. The collusion included discussions between traders of the participating banks on certain Yen-LIBOR submissions.
- 920. The traders involved also exchanged, on occasions, commercially sensitive information relating either to trading positions or to future Yen-LIBOR and Euroyen TIBOR submissions.
- 921. UBS received full immunity for revealing the existence of the cartels. As a result, UBS avoided a fine of around €2.5 billion (\$3.25 billion) for its participation in five of the seven infringements. Citigroup also received full immunity for one of the infringements in which it participated, thereby avoiding a fine of around €5 million (\$71.5 million).
- 922. For their cooperation with the investigation, the EC granted fine reductions to Citigroup, Deutsche Bank, RBS and R.P. Martin.
- 923. The fines imposed by the EC for the Yen Interest Rate Derivatives Cartels are as follows:

Participant	Infringements	Duration of Participation	Reduction Under	Fine (€)
		Per Infringement(s)	the Leniency	
			Notice (%)	
UBS	5	1 month, 8 months, 5	100% for all	0
		months, 10 months, 1	infringements	
		month		
RBS	3	8 months, 5 months, 3	25 % for one	260,056,000
		months	infringement	
Deutsche Bank	2	1 month	35%, 30%	79,897,000
JPMorgan	1	1 month		79,897,000

Citigroup	3	1 month, 2 months, 3	35%, 100%, 40%	70,020,000
		months		
R.P. Martin	1	1 month	25%	247,000

- 924. In the context of the same investigation, the EC also opened proceedings against Broker Defendant ICAP. The EC sent a Statement of Objections to Broker Defendant ICAP on June 10, 2014 outlining ICAP's participation in the Yen interest rate derivatives cartels.
- 925. ICAP chose not to settle the proceedings. On February 4, 2015, the EC fined ICAP €14.96 million (approximately \$17 million). The EC found that ICAP facilitated six of the seven Yen interest rate derivatives cartel agreements through various anticompetitive actions, including disseminating misleading information to certain Yen-LIBOR panel banks in the form of "predictions" or "expectations" of the daily Yen-LIBOR fix in 2007-2010; contacting non-cartel Yen-LIBOR panel members to influence their Yen-LIBOR submissions, and serving as a communication channel between Citigroup and RBS traders.

### B. The Conspiracy to Fix The Prices of Euroyen-Based Derivatives Constituted an Agreement in Restraint of Trade

926. The abundant evidence of collusive price fixing of Euroyen-based derivatives uncovered by the regulators and cited herein restrained trade across a variety of channels of competition. Just like a traditional "brick and mortar" price fixing conspiracy, where manufacturers collude to set a pricing formula for their goods, the Contributor Bank Defendants colluded to fix the prices of their Euroyen-based derivatives through various means, including sharing price and volume information with competitors for the purpose of coordinating prices and agreeing to set Yen-LIBOR and Euroyen TIBOR prices either lower or higher, depending upon their mutual financial interests. This price-fixing resulted in no less of a restraint of trade than a traditional agreement to fix the wholesale prices of, for example, washing machines. The market for Euroyen-based derivatives was unlawfully restrained by price fixing because

collusion, rather than the forces of supply and demand, set artificially supracompetitive and, at times, infracompetitive prices for these derivatives.

#### C. The Conspirators Were Horizontal Competitors In Euroyen-Based Derivatives.

927. Each of the Contributor Bank Defendants were competitors with one another for attracting transactions in Euroyen-based derivatives. Indeed, it was by virtue of their position as competitor banks in this market that these Defendants secured their position as a Yen-LIBOR and Euroyen TIBOR contributor banks. These banks competed for financial positions in this derivatives market in the position of horizontal competitors not only insofar as they occupied the same level of distribution in the marketplace, but because they competed with one another to attract customers for Euroyen-based derivatives transactions and/or to purchase and sell Euroyen-based derivatives contracts and/or to profit or lose on their activities in the foregoing.

#### D. The Collusive Conduct Fixed Prices and Restrained Trade or Changed Output.

- 928. The collusion alleged herein fixed the prices of Euroyen-based derivatives prices when the cartel members agreed to share pricing information and coordinate prices for their derivatives. Moreover, the collusion had the effect of restraining or changing output in the derivatives market because market participants naturally responded to the changed prices. The volume of derivatives transactions was therefore restrained and output changed.
- 929. An example from the many instant messages that reveal collusion among Defendants is instructive. On July 29, 2009, a broker was communicating with a trader at UBS. The broker referenced recent "small reductions" in UBS' Yen-LIBOR rate submissions. The broker mentioned that "External Trader E" at a competing panel bank (Contributor Bank Defendant) was "building positions" in the hopes that the rate would increase. The broker stated that "External Trader E" ". . . could be in for a shock going into august . . . the three muscateers

[sic] could do him a fair bit of damage." When referencing "three muscateers [sic]," the broker was referring to UBS and two other panel banks (not employing External Trader E).

- 930. This instant message shows how the Contributor Bank Defendants *competed* when they set Yen-LIBOR and colluded in an effort to enhance their competitive positions. The "three muscateer [sic]" Contributor Bank Defendants, including UBS, had an agreement to try to set Yen-LIBOR lower during the period when External Trader E was "building positions" on the hope that the rate would go higher. Contributor Bank Defendants had competing financial interests in where the rates came out, so they competed in setting the rates.
- 931. The alleged rate-setting collusion harmed competition among sellers and buyers of Euroyen-based derivatives. Contributor Bank Defendants' Yen-LIBOR and Euroyen TIBOR submissions are supposed to be a proxy for the competitive borrowing rate of each bank. The counterparties to financial instruments that use Yen-LIBOR and/or Euroyen TIBOR do so for the reason that they know that these rates reflect competitive supply and demand influences on the Yen interbank lending market. It is because these rates reflect such competitive prices that they are so commonly used in Euroyen-based derivative contracts to set pricing. When, as here, banks and others colluded and altered Yen-LIBOR and Euroyen TIBOR from competitively set prices to collusively fixed prices, competition in the Euroyen-based derivatives *a fortiori* was affected at the very instant and in the very same manner that the rate itself was collusively set. The price of Euroyen-based derivative contracts—set by collusion—became inherently anticompetitive in the same manner as Yen-LIBOR and Euroyen TIBOR itself became anticompetitive.

### E. The Government Settlements to Date Reveal a High Number of Inter-Firm Communications

- 932. The UBS, RBS, Rabobank, ICAP, Deutsche Bank, Lloyds, and R.P. Martin
  Settlement documents reveal a high number of inter-firm communication between their traders
  and brokers and unidentified traders and brokers at other Contributor Bank and Broker

  Defendants. In all, there are at least hundreds of recorded communications that evidence explicit
  and implicit agreement among traders, submitters and/or brokers at UBS, RBS, Rabobank,
  ICAP, R.P. Martin, Deutsche Bank, Lloyds, and other Contributor Bank and Broker Defendants
  to fix the prices of Euroyen-based derivatives. For example, the FSA determined that former
  UBS Senior Yen Trader Hayes made thirty-nine (39) manipulative requests in July 2009 alone to
  an unnamed broker, identified as "Broker F of Broker Firm C." Public reports later revealed that
  Broker Firm C is Broker Defendant Tullett Prebon.
  - F. Specifically Citing Antitrust Concerns, the JBA Euroyen TIBOR Publication Rules Explicitly Proscribe Advance Information Exchange and Coordination Among Rate-Setting Banks.
- 933. The Japanese Bankers Association published rules, governing TIBOR publication. These rules, entitled "JBA TIBOR Publication Rules" governed both Euroyen TIBOR and Japanese Yen TIBOR. The Euroyen TIBOR part of these rules apply to rates that "reflect[] prevailing conditions in the Japan Offshore Market."
- 934. The JBA Rules specifically warn the reference banks against behavior that would violate the Japanese Antimonopoly Law. Specifically, the JBA Rules stated that "[r]eference banks and market participants must exercise caution when utilizing the JBA TIBOR to prevent engagement in activities that would constitute a violation of the Antimonopoly Law." The JBA Rules included an addenda entitled "Reference: Notes of Publication of the JBA Japanese Yen TIBOR" ("JBA Rules Addendum").

- 935. The JBA Rules Addendum noted that certain actions of reference banks may violate the Japanese Antimonopoly Law, including "advance exchange of information and coordination among reference banks on quoted rate levels to be furnished to [the JBA's] service providers," the precise conduct alleged to be illegal in this lawsuit.
- 936. In promulgating rules designed to address antitrust concerns over advance exchange of information and coordinating rate submissions, the JBA recognized that the very conduct disclosed in the many regulatory investigations had significant anticompetitive effects.

## **CLASS ACTION ALLEGATIONS**

937. Plaintiff brings this action pursuant to Rule 23 of the Federal Rules of Civil Procedure on his own behalf and as a representative of the following Class:<sup>356</sup>

All persons or entities that engaged in a U.S. based transaction in a Euroyen TIBOR futures contract during the period of at least January 1, 2006 through at least June 30, 2011 (the "Class Period"). A U.S. based transaction in a Euroyen TIBOR futures contract means either: (a) a purchase or sale of a Euroyen TIBOR futures contract on the CME, or (b) a purchase or sale of a TFX, SGX or LIFFE Euroyen TIBOR futures contract by a U.S. person or entity from a location within the U.S. Excluded from the Class are the Defendants and any parent, subsidiary, affiliate, or agent of any Defendant.

- 938. The Class is so numerous that the individual joinder of all members is impracticable. While the exact number of Class members is unknown to Plaintiff at this time, Plaintiff is informed and believes that at least thousands of geographically dispersed Class members transacted in Euroyen TIBOR futures contracts worth billions of dollars during the Class Period.
- 939. Plaintiff's claims are typical of the claims of the other members of the Class.

  Plaintiff and the members of the Class sustained damages arising out of Defendants' common

<sup>&</sup>lt;sup>356</sup> Plaintiff has defined the Class based on currently available information and hereby reserves the right to amend the definition of the Class, including, without limitation, the Class Period.

course of conduct in violation of law as complained of herein. The injuries and damages of each member of the Class were directly caused by Defendants' wrongful conduct in violation of the laws as alleged herein.

- 940. Plaintiff will fairly and adequately protect the interests of the members of the Class. Plaintiff is an adequate representative of the Class and have no interests which are adverse to the interests of absent Class members. Plaintiff has retained counsel competent and experienced in class action litigation, including commodity manipulation and antitrust class action litigation.
- 941. Common questions of law and fact exist as to all members of the Class which predominate over any questions affecting solely individual members of the Class. These common questions of law and facts include, without limitation:
  - (a) Whether Defendants manipulated Euroyen TIBOR futures contracts in violation of the CEA;
  - (b) Whether such manipulation caused Euroyen TIBOR futures contracts to be artificial:
  - (c) Whether such manipulation caused cognizable legal injury under the CEA;
  - (d) The operative time period and extent of Defendants' foregoing violations; and
  - (e) Whether such injury or the fact or extent of such artificiality may be established by common, class-wide means, including, for example, by regression analysis, econometric formula, or other economic tests.
- 942. A class action is superior to other methods for the fair and efficient adjudication of this controversy because joinder of all Class members is impracticable. Treatment as a class action will permit a large number of similarly situated persons to adjudicate their common claims in a single forum simultaneously, efficiently, and without the duplication of effort and expense that numerous individual actions would engender. Class treatment will also permit the

adjudication of claims by many class members who could not afford individually to litigate claims such as those asserted in this Complaint. The cost to the court system of adjudication of such individualized litigation would be substantial. The prosecution of separate actions by individual members of the Class would create a risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Defendants.

943. Plaintiff is unaware of any difficulties that are likely to be encountered in the management of this action that would preclude its maintenance as a class action.

## TOLLING AND FRAUDULENT CONCEALMENT

- 944. The statute of limitations relating to the claims for relief alleged herein were tolled because of fraudulent concealment, including: (1) Defendants' active acts of concealment that were independent of the acts that constituted the underlying conduct giving rise to their liability; and (2) the inherently self-concealing nature of Defendants' misconduct. Plaintiff and the Class had no knowledge of Defendants' unlawful and self-concealing manipulative acts and could not have discovered same by the exercise of due diligence until July 26, 2011 as to Defendant UBS only and until February 2012 as to several other Contributor Panel Banks and Broker Defendants.
- 945. Plaintiff and the Class' investigation of their claims required time and resources to identify additional Defendant wrongdoers through, among other things, economic analysis of public submission data and "reverse engineering" to identify unnamed co-conspirator Contributor Panel Banks and brokers. At least one Defendant, Lloyds Bank, represented to Plaintiff and the Class' counsel that its internal investigation revealed no instances of wrongdoing, inducing them to voluntarily dismiss the action and entering into a tolling agreement. It was not until later disclosures by other co-conspirators revealed to counsel, through additional "reverse engineering" efforts, and Lloyds own LIBOR settlement, that the

public information revealed Lloyds' culpability that Plaintiff and the Class determined that Lloyds misrepresented the facts. With each succeeding indictment and government investigation disclosure, more and more information is revealed and additional Defendants and the scope of Defendants' wrongdoing becomes clearer.

946. UBS' July 26, 2011 disclosure is the earliest Plaintiff could have suspected UBS' role in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Plaintiff could not have suspected, much less known, of the other Contributor Bank or Broker Defendants involvement in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives until much later. Plaintiff thus asserts the tolling of the applicable statute of limitations affecting the rights of the claims of relief asserted by Plaintiff. Defendants are also equitably estopped from asserting that any otherwise applicable limitations period has run.

## A. Dates of Initial Public Disclosures

947. On March 15, 2011, UBS disclosed in its 2010 annual report (at page 318 of 430) that it had received subpoenas from the Commodity Futures Trading Commission, U.S. Department of Justice, and other U.S. government agencies, as well as an information request from the Japanese Financial Supervisory Agency, as follows:

UBS has received subpoenas from the SEC, the US Commodity Futures Trading Commission and the US Department of Justice in connection with investigations regarding submissions to the British Bankers' Association, which sets LIBOR rates. UBS understands that the investigations focus on whether there were improper attempts by UBS, either acting on its own or together with others, to manipulate LIBOR rates at certain times. In addition, UBS has received an order to provide information to the Japan Financial Supervisory Agency concerning similar matters. UBS is conducting an internal review and is cooperating with the investigations.

- 948. UBS failed to mention in its 2010 annual report whether the foregoing investigations related to submissions for Yen-LIBOR or Euroyen TIBOR (or other rates).
- 949. It was not until UBS filed a Form 6-K with the SEC on July 26, 2011 that UBS disclosed for the first time that it had received conditional leniency from the Antitrust Division of the U.S. Department of Justice in connection with potential antitrust or competition law violations related to submissions of Yen-LIBOR and Euroyen TIBOR. The July 26, 2011 Form 6-K was the first public disclosure by UBS of allegations of false reporting by it with respect to Yen-LIBOR or Euroyen-TIBOR.
- 950. UBS' July 26, 2011 disclosure is the earliest Plaintiff could have suspected UBS' role in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Plaintiff could not have suspected, much less known, of the other Contributor Bank or Broker Defendants involvement in the manipulation until much later.
- 951. For example, on February 13, 2012, the Wall Street Journal reported that the Canadian Competition Commission ("CCB") joined U.S., European and Japanese regulators in investigations into reference banks collusion and resulting manipulation of Euroyen TIBOR and Yen-LIBOR. Later, on February 17, 2012, The Wall Street Journal reported that "lawyers acting for the cooperating bank had told [the CCB] that traders at six banks on the yen Libor panel—Citigroup Inc., Deutsche Bank AG, HSBC Holdings plc, J.P. Morgan Chase & Co., Royal Bank of Scotland Group PLC and UBS—'entered into agreements to submit artificially high or artificially low' quotes . . . ." The same report also confirmed that the CCB was investigating whether the traders also "conspired" with individuals at individual inter-dealer broker firms, including Broker Defendants ICAP and R.P. Martin, "to use their influence with yen Libor submitters to affect what rates were submitted by other yen Libor panel banks." The foregoing

reports in February 2012 are the first public disclosures of Broker Defendants ICAP and R.P. Martin involvement in the manipulation of Yen-LIBOR or Euroyen-TIBOR.

952. Additional public disclosures of other Contributor Bank and Broker Defendants' involvement in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyenbased derivatives came even later than February 2012. For example, the first public disclosure of the involvement of Broker Defendants ICAP Europe Limited and Martin Brokers (UK) Ltd. in the manipulation of Yen-LIBOR did not occur until ICAP Europe Limited settled civil charges with the CFTC and FCA on September 25, 2013 and Martin Brokers (UK) Ltd. settled same with the CFTC and FCA on May 15, 2014. Similarly, the first public disclosure of Broker Defendant Tullett Prebon's involvement in the manipulation of Yen-LIBOR did not occur until February 2013 when news reports speculated that Tullett Prebon conspired with former UBS and Citibank Senior Yen Trader Tom Hayes. In response to the public reports, a Tullett Prebon spokesperson commented that "Tullett Prebon has never been informed by the FSA [Financial Services Authority] or any other regulatory authority that Tullett Prebon or any of its brokers are under investigation in relation to LIBOR." Thus, it was not until June 20, 2013 when the U.K. SFO identified Tullett Prebon as an alleged co-conspirator of former UBS and Citibank Senior Yen Trader Tom Hayes in the manipulation of Yen-LIBOR and other interbank offered rates that Plaintiff had knowledge of Tullett Prebon's involvement in the alleged conspiracy and manipulation.

953. The Structure of the Yen-LIBOR and Euroyen TIBOR Submission Process

Gave Plaintiff No Reason To Suspect Defendants Were Engaged in Wrongdoing.

- 954. In order to ensure that Yen-LIBOR constituted the average competitive market interest rate, the Defendants, through their trade organization known as the British Bankers Association ("BBA"), promulgated certain Instructions. By promulgating these Instructions through their BBA trade organization and then making daily Yen-LIBOR submissions purportedly pursuant to these Instructions, each Defendant impliedly but repeatedly represented that its submissions complied with the Instructions. By such conduct, each Defendant represented that its submissions transmitted to the markets reflected that Defendant's competitive market borrowing rate.
- 955. Specifically, each Defendant's conduct was undertaken pursuant to and impliedly represented that it complied with, among others, the following Instructions promulgated by the BBA:
  - A. An individual BBA LIBOR Contributor Panel Bank will contribute the rate at which it could borrow funds, were it to do so by asking for and then accepting inter-bank offers in reasonable market size just prior to 1100.
  - B. Rates shall be contributed for currencies, maturities and fixing dates and according to agreed quotation conventions.
  - C. Contributor Banks shall input their rate without reference to rates contributed by other Contributor Banks.
  - D. Rates shall be for deposits:
    - made in the London market in reasonable market size;
    - that are simple and unsecured....

G. .... The Designated Distributor will endeavor to identify and arrange for the correction of manifest errors in rates input by individual Contributor Banks prior to 1130.

The Designated Distributor will publish the average rate and individual Contributor Banks' rates at or around 1130hrs London time.

Remaining manifest errors may be corrected over the next 30 minutes. The Designated Distributor then will make any necessary adjustments to the average rate and publish it as the BBA LIBOR Fixing at 1200hrs."357

- 956. The foregoing Instructions ensured in at least three ways that Yen-LIBOR submissions constituted a competitive market rate and that the Yen-LIBOR average was publishing a competitive average market rate. First, each individual bank was to make its own submission relating to the competitive market rate at which it could borrow funds. *See* Instruction "A" above. This borrowing rate was expressly limited to that for loans of "reasonable market size." The "reasonable market size" requirement for each bank's estimate of borrowing costs, most closely captured the competitive market borrowing rate.
- 957. Second, each panel bank was prohibited from referring to, or coordinating with other panel banks in the submissions that such panel bank made. See Instruction "C" above. This prohibition of information sharing was reinforced and further ensured by the Instruction "G" above. Specifically, Instruction "G" mandated that there would be only a simultaneous

 $<sup>\</sup>frac{357}{https://web.archive.org/web/20080930203457/http:/www.bba.org.uk/bba/jsp/polopoly.jsp?d=225\&a=1413\&artpage=all}{(last viewed July 23, 2015)} (emphasis added).$ 

release of all banks' rates. Such simultaneous release prevented any coordination among the banks after receipt from the BBA of another bank's rate. This forced each bank individually to submit its own competitive rate for borrowing.

- 958. Third, the Yen-LIBOR rate was that applicable to deposits made in the "market" and, even then, only those which were of "reasonable market size." See Instruction "D" above. These requirements further ensured that Yen-LIBOR reflected a competitive "market" rate. Instruction "D" prohibited the use, for example, as the basis for each bank's submission of any non-market borrowing rates. It even prohibited market rates for irregular sizes. Once again, these requirements most closely captured the competitive market rate.
- 959. Taken together, the foregoing Instructions, if followed, rendered Yen-LIBOR the average competitive market borrowing rate. Such Instructions prohibited each bank's Yen-LIBOR submission from reflecting any collusion, coordination, advance notice among the competing banks, or sharing (directly or through brokers) of their intended rate submissions.
- 960. Similarly, the Instructions, taken together, prohibited each individual bank from using its self-interest in profits on its derivatives positions as a substitute for its competitive borrowing rate in determining the rate submission the bank would make.
- 961. On the contrary, the sole basis for the submission by each bank was limited to "the rate at which it could borrow funds…in reasonable market size just prior to 1100." See Instruction "A" above. Defendants, through the BBA, made this requirement even more explicit during 2008 when they stated that the

basis for a ... bank's submissions ...was to be the rate at which members of the bank's staff primarily responsible for management of the bank's cash, rather than the bank's derivatives trading book, believed that the bank could borrow unsecured inter-bank funds in the London money market. Further, according to the BBA, a Contributor Panel bank should not have contributed a rate based on

the pricing of any derivative financial instrument. In other words, a Contributor Panel bank's LIBOR submissions should not have been influenced by its motive to maximize profit or minimize losses in derivatives transactions tied to LIBOR.<sup>358</sup>

- 962. By continuing to make their Yen LIBOR submissions, each Defendant impliedly represented that it was submitting its competitive market borrowing rate and was not submitting a non-competitive rate that served its interests in manipulating the markets. Defendants continued to make these representations long after their re-affirmance in 2008 (quoted above) that their submissions were to reflect their competitive market borrowing rate rather than their self-interest in manipulating prices.
- 963. However, these representations were false and fraudulent. For example,
  Defendant UBS continued to make false and manipulative submissions from 2005 through 2010.
  Accordingly, UBS and other Defendants intentionally and carefully limited their
  communications to secret communications that were either outside of business channels or in
  private chatrooms, emails, and through traders' personal cellphones. Thereby, Defendants
  intentionally, affirmatively and fraudulently concealed the facts that they were conspiring among
  themselves to make, on virtually a daily basis, manipulated submissions of non-competitive rates
  that benefited their Euroyen-based derivatives positions.
- The Manipulative and Collusive Conduct Was Inherently Self-Concealing.

  The conduct that gives rise to the violations of law set forth herein are inherently self-concealing.

  See, e.g., In re Natural Gas Commodity Litig., 337 F. Supp. 2d 498, 513 (S.D.N.Y. 2004)

  ("[a]mong the principal allegations against Defendants are assertions that they reported false trade data to entities that collect that information for public dissemination, and that they engaged

<sup>&</sup>lt;sup>358</sup> See Exhibit I-1.

in fraudulent wash trades...Such activities are inherently self-concealing."); *In re Issuer Plaintiff Initial Pub. Offering Antitrust Litig.*, 00 CIV. 7804 (LMM), 2004 WL 487222, at \*4 (S.D.N.Y. Mar. 12, 2004) (recognizing that bid-rigging and price-fixing conspiracies are inherently self-concealing) (citing *State of N.Y. v. Hendrickson Bros., Inc.*, 840 F.2d 1065, 1084 (2d Cir. 1988)). Further, as certain of defendants' traders recognized, the manipulation of Euroyen TIBOR and Yen-LIBOR required that it remain concealed from the BBA, regulators and the public in order to ensure its success over an extended period of time.

- 965. Extraordinary Acts of Concealment Independent of the Conduct Underlying their Violations of Law. In addition to and separate from the inherently self-concealing manipulative and acts alleged herein as to Defendants' Yen LIBOR and Euroyen TIBOR manipulation and collusion, many Defendants engaged in extraordinary measures to hide their wrongdoing from government investigators and their victims, including Plaintiff. These acts included:
  - (1) avoiding discussing the manipulation of Yen-LIBOR and Euroyen TIBOR in public forums (*see*, App. *passim*);
  - (2) directing their Euroyen-based derivatives traders and Yen-LIBOR and Euroyen TIBOR submitters to limit their internal written communications discussing the manipulation of Yen-LIBOR and Euroyen TIBOR;
  - (3) agreeing to stagger the submission of false reports over successive trading days and over extended periods of time (*e.g.*, agree that an artificially low rate would be submitted by co-conspirator A today, by co-conspirator B tomorrow and co-conspirator C the next day, etc.) in order to exert a greater and longer-lasting manipulative impact on Euroyen-based derivative prices and to mask their false reporting from other market players;
  - (4) concocting false stories they could give in the event someone (*e.g.*, the BBA, JBA, regulators, or other market participants) questioned their false Yen-LIBOR or Euroyen TIBOR submissions;
  - (5) lying to their own attorneys during internal investigations of rate manipulation, including falsely claiming that their Yen trading desks did not have any derivative positions with exposure to Euroyen rates and the interest rate submission process did not take into account trading positions;

- (6) having the Broker Defendants disseminate false run-thrus or "Suggested LIBORs" daily to signal false directional trends of future Euroyen rates;
- (7) having Broker Defendants post and disseminate false or "spoof" bids and offers regarding prevailing Euroyen rates;
- (8) engaging in wash trades and other illicit sham transactions to surreptitiously pay the Broker Defendants for their assistance in manipulating Yen-LIBOR and Euroyen TIBOR;
- (9) paying bribes and kickbacks to Broker Defendants for their LIBOR "fixing services" to maintain the Broker Defendants cooperation and continue the successful manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives;
- (10) spoliating evidence of their wrongdoing by destroying LIBOR-related phone recordings and other documents after being put on notice of government investigations;
- (11) lying to regulators and concealing the findings of LIBOR manipulation by one regulator from another regulator;
- (12) using electronic chat rooms open only to a select group of traders and brokers (*see*, App. *passim*);
- (13) using code words to avoid detection like "arbi" to signal a manipulative request or "curry" to indicate a bribe for advancing the manipulation was coming;
- (14) intentionally taking manipulative communications "offline" to continue the manipulative conversations in-person or on personal cellphones or through text messaging to avoid detection;
- (15) reorganizing trading desks to facilitate verbal communication, and eliminate written communication, between their Euroyen traders and submitters;
- (16) having compliance officers falsely attest to the BBA that they audited their LIBOR submission processes;
- (17) refusing to conduct internal audits of Yen-LIBOR and Euroyen TIBOR submissions processes referring to the audits as nothing more than "an arse-covering exercise [by the BBA]";
- (18) maintaining no LIBOR-specific systems and controls that could detect LIBOR-related "buzz words" indicative of manipulation; and
- (19) putting in place lax compliance standards they knew would not detect wrongdoing.

Been Revealed to Plaintiff Through Testimony Adduced at Former UBS and Citibank

Trader Thomas Haves' United Kingdom Criminal Trial. For example, Hayes explained to ICAP broker Darrell Read in a March 2010 telephone conversation that Citi's Yen-LIBOR submitters were generally not receptive to manipulative requests unless the requests were made "offline." Hayes stated to Read in words or substance, "You know because they were like pretty reluctant to do anything on the libors but if you talk to them like you now on a non recorded line. Blah blah blah...."

## **CLAIMS FOR RELIEF**

## FIRST CLAIM FOR RELIEF

(For Manipulation In Violation of The Commodity Exchange Act) 7 U.S.C. §§ 1, et seq.

# **Against All Defendants**

- 967. Plaintiff incorporates by reference and re-alleges the preceding allegations as though fully set forth herein.
- 968. As alleged herein, Defendants utilized diverse and pervasive means to manipulate Euroyen TIBOR, Yen-LIBOR, and Euroyen-based derivatives prices, including Euroyen futures contract prices to artificial levels during the Class Period in violation of the CEA by: (i) making false reports prohibited in Section 4b(a) of the CEA, 7 U.S.C. § 6b, and criminalized in Section 9(a) of the CEA, 7 U.S.C. § 13(a); (ii) engaging in wash sales or accommodation trades, criminalized and prohibited by Section 4c(a) of the CEA, 7 U.S.C. § 6c(a); (iii) floating false rumors, criminalized and prohibited in Section 9(a) of the CEA, 7 U.S.C. § 13(a); (iv) engaging in abusive cash market trading, criminalized and prohibited by Section 4c(a) of the CEA, 7 U.S.C. § 6c(a); (v) abusing dominant market positions, criminalized and prohibited in Section

9(a) of the CEA, 7 U.S.C. § 13(a); (vi) making fictitious trades, criminalized and prohibited by Section 4c(a) of the CEA, 7 U.S.C. § 6c(a); and (vii) making "spoof" offers and bids, criminalized and prohibited by Section 4c(a) of the CEA, 7 U.S.C. § 6c(a). Plaintiff has a private right of action under Section 22(a) of the CEA, 7 U.S.C. § 25(a), for each and every of the foregoing manipulative acts by the Contributor Bank and Broker Defendants.

969. **Ability to Influence Prices.** (a) The Contributor Bank Defendants served as JBA Euroyen TIBOR and/or BBA Yen-LIBOR panel members during the Class Period. The Contributor Bank Defendants knowingly delivered or caused to be delivered JBA Euroyen TIBOR and/or BBA Yen-LIBOR submissions through the instrumentalities of interstate commerce, including but not limited to, wire and U.S. mails. The submissions were also caused to be delivered through the U.S. mails or interstate commerce through the daily dissemination and publication globally, including into the United States, of the Contributor Bank Defendants' submissions and daily official benchmark interest rates by at least Thomson Reuters on behalf of the JBA and BBA, and other third party vendors. The Contributor Bank Defendants' submissions were used during the Class Period to determine the official published rates for Euroyen TIBOR and Yen-LIBOR which are calculated based on a trimmed average of the submissions. By virtue of this methodology, the Contributor Bank Defendants had the ability to (and did) influence and affect the rate that would become the official Euroyen TIBOR and/or Yen-LIBOR for any tenor. Further, the Contributor Bank Defendants' Euroyen TIBOR and Yen-LIBOR submissions to the JBA and/or BBA contained market information concerning the costs of borrowing unsecured funds in particular tenors in the Euroyen interbank market, as well as the Contributor Bank Defendants' supposed ability to borrow funds in the Euroyen market. (b) The Broker Defendants served as cash broker and/or interdealer brokers during the Class

Period, and during the Class Period knowingly delivered or caused to be delivered through the instrumentalities of interstate commerce, including but not limited to, wire and U.S. mails information (*e.g.*, false run-throughs, etc.) affecting or determining Euroyen TIBOR, Yen-LIBOR, and the prices of Euroyen futures contracts. (c) Such market information affected the prices of commodities in U.S. interstate commerce during the Class Period, including the daily rates at which Euroyen TIBOR and Yen-LIBOR were fixed and the prices of Euroyen TIBOR futures contracts, among other Euroyen-based derivatives, which were benchmarked, traded and price settled to such Euroyen rates.

970. Causation and Artificial Price. During the Class Period, the daily rates at which Euroyen TIBOR and Yen-LIBOR were fixed and the prices of Euroyen TIBOR futures contracts which were benchmarked, traded, priced and settled to such rates did not result from legitimate market information, competition, supply factors and demand factors. For example, during the Class Period, the Contributor Bank Defendants' Euroyen TIBOR and Yen-LIBOR submissions were false, misleading or knowingly inaccurate because they were based in whole or in part on impermissible and illegitimate factors, for instance, artificial Euroyen TIBOR and/or Yen-LIBOR rates that benefitted the Contributor Bank Defendants' derivatives trading positions. By using these impermissible and illegitimate factors in making Euroyen TIBOR and Yen-LIBOR submissions, the Contributor Bank Defendants conveyed false, misleading or knowingly inaccurate information that the rates it submitted were based on and related solely to the costs of borrowing unsecured funds in the Euroyen interbank market and were truthful and reliable. Further, the Broker Defendants knowingly transmitted or caused to be transmitted false reports and other false market information (e.g., price and volume information) regarding Euroyen pricing and prices. As a direct result, Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen

TIBOR futures contracts which were benchmarked, traded, priced and settled to such rates were rendered artificial. Other unlawful conduct engaged in by Defendants during the Class Period, *e.g.*, wash sales, accommodation trades, abusive, non-bona fide Euroyen-based derivatives trading, "spoof" offers and bids, further injected illegitimate supply and demand factors into the Euroyen market and further rendered Euroyen prices, including the prices of Euroyen futures contracts, artificial.

- 971. Intent. As evidenced by extensive communications produced in connection with the UBS, RBS, Rabobank, ICAP, R.P. Martin, Lloyds, Deutsche Bank, and Barclays Settlements, the Defendants fully, intentionally and systematically manipulated Euroyen TIBOR and Yen-LIBOR to artificial levels for the express purpose of obtaining hundreds of millions (if not billions) in ill-gotten trading profits on Euroyen TIBOR futures and other Euroyen-based derivatives contracts held by them or other co-conspirators, the prices of which (and thus profits or losses) were benchmarked, traded, priced and settled to such rates. As an intended and direct consequence of Defendants' knowingly unlawful conduct, the prices of Euroyen futures contracts were manipulated to artificial levels by the Contributor Bank and Broker Defendants and their aiders and abettors throughout the Class Period.
- 972. The CME has been designated by the CFTC as a contract market pursuant to Section 5 of the CEA, 7 U.S.C. § 7. CME submits to the CFTC various rules and regulations for approval through which CME designs, creates the terms of, and conducts trading in Euroyen TIBOR futures contracts. CME is an organized, centralized market that provides a forum for Euroyen TIBOR futures contracts.
- 973. Each Defendant, individually, in concert, and/or as one another's control persons or agents, through their acts alleged herein, from at least January 1, 2006 through June 30, 2011,

specifically intended to and did cause unlawful and artificial prices of Euroyen futures contracts in violation of the CEA, 7 U.S.C. § 1, et seq.

- 974. The Defendants' undisclosed conduct and trading activity alleged herein constituted a manipulation of CME Euroyen TIBOR futures contract prices in violation of Section 4b(a), 4c(a), 9(a) and 22(a) of the CEA, 7 U.S.C. §§ 6b(a), 6c(a), 13(a)(2), and 25(a).
- 975. As a direct result of Defendants' unlawful conduct, Plaintiff and members of the Class have suffered actual damages and injury in fact due to artificial CME Euroyen TIBOR futures contract prices to which they would not have been subject but for the unlawful conduct of the Defendants as alleged herein. Plaintiff and members of the Class were further legally injured and suffered injury in fact that they transacted CME Euroyen TIBOR futures contracts in an artificial and manipulated market operating under the artificial prices caused by the Defendants.
- 976. Plaintiff and members of the Class who purchased or sold CME Euroyen TIBOR futures contracts during the Class Period were injured and are each entitled to their actual damages for the violations of the CEA alleged herein.

## **SECOND CLAIM FOR RELIEF**

(For Aiding and Abetting Manipulation In Violation of The Commodity Exchange Act) 7 U.S.C. § 1 et seq.

### **Against All Defendants**

- 977. Plaintiff incorporates by reference and re-alleges the preceding allegations, as though fully set forth herein.
- 978. The Defendants each knowingly aided, abetted, counseled, induced and/or procured the violations of the CEA by other Defendants as alleged herein. Each Defendant did so knowing of other Defendants' manipulation of Yen-LIBOR, Euroyen TIBOR, and Euroyen-based derivatives, including Euroyen TIBOR futures contracts, and substantially and willfully

intended to assist these manipulations to cause the prices of CME Euroyen TIBOR futures contracts to be artificial during the Class Period, in violation of Section 22(a)(1) of the CEA, 7 U.S.C. §25(a)(1).

- 979. Under Section 13c(a) of the CEA, 7 U.S.C. §13, Defendants are liable for willfully intending to assist the manipulation.
- 980. Other persons willfully intended to assist these manipulations to cause the price of CME Euroyen TIBOR futures contracts to reach artificial levels during the Class Period, in violation of Section 22(a)(1) of the CEA, 7 U.S.C. § 25(a)(1). They are the agents and unnamed co-conspirators as alleged herein.
- 981. Plaintiff and members of the Class are each entitled to actual damages sustained in CME Euroyen TIBOR futures contracts for the violations of the CEA alleged herein.

## PRAYER FOR RELIEF

Accordingly, Plaintiff demands relief as follows:

- A. For an order certifying this lawsuit as a class action pursuant to Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure, and designating Plaintiff as the Class representative, and their counsel be appointed as Class counsel;
- B. For a judgment awarding Plaintiff and the Class damages against Defendants for their violations of the CEA, together with prejudgment interest at the maximum rate allowable by law;
- C. For an award to Plaintiff and the Class of their costs of suit, including reasonable attorneys' and experts' fees and expenses; and
  - D. For such other and further relief as the Court may deem just and proper.

#### **DEMAND FOR A JURY TRIAL**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff respectfully demands a trial by jury of all issues so triable.

Dated: February 29, 2016 White Plains, New York

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